

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

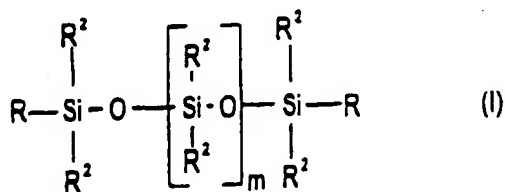
**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

**WHAT IS CLAIMED IS:**

1. A process comprising the step of introducing into a cosmetic, hygiene or pharmaceutical composition an effective amount of an  $\alpha,\omega$ -substituted oxyalkylenated silicone for the purpose of reducing or eliminating the transfer or migration of said composition when put to use.

2. A process comprising the step of introducing into a cosmetic, hygiene or pharmaceutical composition an effective amount of an  $\alpha,\omega$ -substituted oxyalkylenated silicone for the purpose of improving the staying power of said composition when put to use.

3. The process according to claim 1, wherein said  $\alpha,\omega$ -substituted oxyalkylenated silicone corresponds to formula (I) below:



in which:  $\text{R} = -(\text{CH}_2)_p\text{O}-(\text{C}_2\text{H}_4\text{O})_x(\text{C}_3\text{H}_6\text{O})_y\text{R}^1$

where: -  $\text{R}^1$  represents H,  $\text{CH}_3$  or  $\text{CH}_2\text{CH}_3$ ,

- p is an integer ranging from 1 to 5, x ranges from 1 to 100 and y ranges from 0 to 50,

- the units ( $C_2H_4O$ ) and ( $C_3H_6O$ ) being distributed randomly or in blocks,
- the radicals  $R^2$  independently represent a  $C_1$ - $C_3$  alkyl radical or a phenyl radical,
- $5 \leq m \leq 300$ .

4. The process according to claim 3, wherein said  $R^2$  radicals are all methyl radicals and:

- p ranges from 2 to 4,
- x ranges from 3 to 100,
- m ranges from 50 to 200.

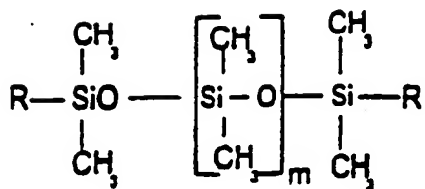
5. The process according to claim 3 wherein the average molecular weight of R ranges from 800 to 2600.

6. The process according to claim 3, wherein the weight ratio of the  $C_2H_4O$  units relative to the  $C_3H_6O$  units ranges from 100:10 to 20:80.

7. The process according to claim 6, wherein said weight ratio is about 42/58.

8. The process according to claim 3, wherein  $R^1$  is a methyl group.

9. The process according to claim 1, wherein said  $\alpha,\omega$ -substituted oxyalkylenated silicone corresponds to the following formula:



in which:

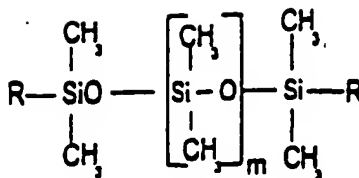
-  $m = 100$ ,

-  $\text{R} = (\text{CH}_2)_3\text{-O-(C}_2\text{H}_4\text{O)}_x\text{-(C}_3\text{H}_6\text{O)}_y\text{-CH}_3$ , where  $x$  ranges from 3 to 100 and  $y$  ranges from 1 to 50, the weight ratio of the number of  $\text{C}_2\text{H}_4\text{O}$  units to the number of  $\text{C}_3\text{H}_6\text{O}$  units being about 42/58, the average molecular weight of  $\text{R}$  ranging from 800 to 1000.

10. The process according to claim 1, wherein said  $\alpha,\omega$ -substituted oxyalkylenated silicone is present in the composition in a proportion ranging from 0.1 to 30%, by weight relative to the total weight of the composition.

11. The process according to claim 10, wherein said  $\alpha,\omega$ -substituted oxyalkylenated silicone is present in the composition in a proportion ranging from 0.5 to 10%.

12. A water-in-oil emulsion comprising an aqueous phase and a fatty phase comprising at least one silicone oil, said emulsion further comprising at least one dyestuff and at least one  $\alpha,\omega$ -substituted oxyalkylenated silicone of the following formula:



- in which:

-  $m = 100$ ,

-  $\text{R} = (\text{CH}_2)_3\text{-O-(C}_2\text{H}_4\text{O)}_x\text{-(C}_3\text{H}_6\text{O)}_y\text{-CH}_3$ , where  $x$  ranges from 3 to 100 and  $y$  ranges from 1 to 50, the weight ratio of the number of  $\text{C}_2\text{H}_4\text{O}$  units to the number of  $\text{C}_3\text{H}_6\text{O}$  units being about 42/58, the average molecular weight of  $\text{R}$  ranging from 800 to 1000.

13. The emulsion according to claim 12, wherein said at least one oxyalkylenated silicone is present in the emulsion in a proportion ranging from 0.1 to 30% by weight relative to the total weight of the emulsion.

14. The emulsion according to claim 13, wherein said at least one oxyalkylenated silicone is present in the emulsion in a proportion ranging from 0.5 to 10%.

15. The emulsion according to claim 12, wherein said at least one dyestuff is chosen from inorganic and organic pigments, lakes and dyes which are soluble in aqueous or organic media.

16. The emulsion according to claim 15, wherein said pigments are chosen from titanium dioxide, zirconium dioxide, cerium dioxide, zinc oxide, iron oxide, chromium oxide, ferric blue, pearlescent agents, coloured titanium mica, carbon black, barium, strontium, calcium and aluminium lakes, pigments coated with at least one silicone compound chosen from PDMSs, and pigments coated with polymers.

17. The emulsion according to claim 16 wherein said pearlescent agents are selected from mica coated with titanium oxide, mica coated with iron oxide, mica coated with natural pigment and mica coated with bismuth oxychloride, and further wherein said polymers are selected from polyethylenes and amino acids.

18. The emulsion according to claim 16, wherein said at least one pigment is present in the emulsion in a proportion ranging from 0 to 20%, by weight relative to the total weight of the emulsion.

19. The emulsion according to claim 18, wherein said at least one pigment is present in a proportion ranging from 2 to 15%.

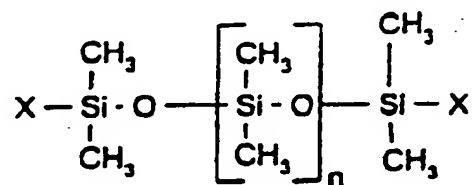
20. The emulsion according to claim 15, wherein said at least one dye is chosen from the disodium salt of ponceau, the disodium salt of alizarin green, quinoline yellow, the trisodium salt of amaranth, the disodium salt of tartrazine, the monosodium salt of rhodamine, the disodium salt of fuchsin, and xanthophyll.

21. The emulsion according to claim 20, wherein said at least one dye is present in the emulsions in a proportion ranging from 0 to 15%, by weight relative to the total weight of the emulsion.

22. The emulsion according to claim 21, wherein said at least one dye is present in the emulsion in a proportion ranging from 8 to 12%.

23. The emulsion according to claim 12, wherein said at least one silicone oil is chosen from linear, optionally functionalized, and cyclic polydiorganosiloxanes and optionally crosslinked organopolysiloxanes.

24. The emulsion according to claim 23, wherein said polydiorganodiloxanes correspond to the following formula:

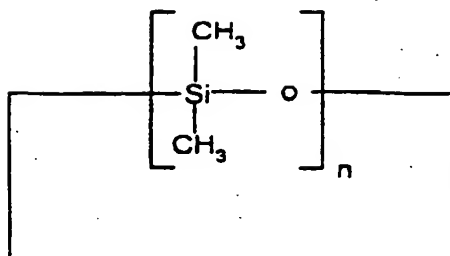


in which:

- X is -CH<sub>3</sub> or OH, and

- n is an integer ranging from 0 to 2000.

25. The emulsion according to claim 23, wherein said cyclic polydiorganodiloxanes are selected from cyclomethicones and mixtures of cyclomethicones corresponding to the following formula:



in which:

- n is an integer from 3 to 8.

26. The emulsion according to claim 25, wherein said cyclomethicones are chosen from cyclotetradimethylsiloxane (n=4), cyclopentadimethylsiloxane (n=5) and cyclohexadimethylsiloxane (n=6).

27. The emulsion according to claim 23, wherein said at least one silicone oil selected from cyclic polydiorganosiloxanes.

28. The emulsion according to claim 12, wherein said at least one silicone oil is present in a proportion of at least 5%, by weight relative to the total weight of the composition.

29. The emulsion according to claim 28, wherein said at least one silicone oil is present in a proportion ranging from 25 to 45%.



30. The emulsion according to claim 12, wherein said emulsion further comprises silicone compounds chosen from poly(C<sub>1</sub>-C<sub>20</sub>)alkylsiloxanes, phenylsilicone oils, silicone gums, and silicone waxes.

31. The emulsion according to claim 30, wherein said silicone gums have a molecular mass ranging from about 200,000 to about 1,000,000, and with a dynamic viscosity of greater than 500,000 mPa.s.

32. The emulsion according to claim 30, wherein said silicones are present in an amount up to 5% by weight of active material in the final emulsion.

33. The emulsion according to claim 32, wherein said silicone gums are present in an amount up to 1%.

34. The emulsion according to claim 30, wherein said silicone waxes are substituted linear polysiloxanes.

35. The emulsion according to claim 34, wherein said substituted linear polysiloxanes are chosen from polyether silicone waxes and alkyldimethicones and alkoxydimethicones containing from 16 to 45 carbon atoms.

36. The emulsion according to claim 30, wherein said silicone waxes are present in a proportion ranging from 0 to 15% by weight of the final emulsion.

37. The emulsion according to claim 36, wherein said silicone waxes are present in an amount ranging from 2 to 10%.

38. The emulsion according to claim 12, wherein said emulsion further comprises silicone resins comprising a combination of the units  $R_3SiO_{1/2}$ ,  $R_2SiO_{2/2}$ ,  $RSiO_{3/2}$ , and  $SiO_{4/2}$ .

39. The emulsion according to claim 12, wherein said emulsion further comprises at least one non-silicone fatty substance chosen from pasty fatty substances, gums, waxes and oils of plant, mineral, animal and synthetic origin.

40. The emulsion according to claim 12, wherein said fatty phase further comprises at least one hydrocarbon-based oil in an amount up to 40% by weight relative to the total weight of the fatty phase of the emulsion.

41. The emulsion according to claim 12, wherein said fatty phase further comprises lipophilic adjuvants chosen from lipophilic UV screening agents, lipophilic vitamins, antioxidants, fragrances and ceramides.

42. The emulsion according to claim 12, wherein said aqueous phase comprises water or a floral water.

43. The emulsion according to claim 12, wherein said aqueous phase comprises from 0 to 14% by weight, relative to the total weight of the aqueous phase, of a lower  $C_2$ - $C_6$  monoalcohol or a polyol.

44. The emulsion according to claim 12, wherein said aqueous phase further comprises adjuvants and active principles.

45. The emulsion according to claim 44, wherein said active principles are present in a proportion ranging from 1 to 15%.

46. The emulsion according to claim 12, wherein said aqueous phase is present in an amount ranging from 35 to 80% of the total weight of the composition.

47. The emulsion according to claim 12, wherein said emulsion comprises from 30 to 55% by weight of fatty phase and 35 to 75% by weight of aqueous phase.

48. The emulsion according to claim 12, wherein said emulsion further comprises at least one co-surfactant or at least one thickener.

49. The emulsion according to claim 12, wherein said emulsion further comprises at least one filler.

50. The emulsion according to claim 49, wherein said at least one filler is chosen from talc, mica, silica, kaolin, Teflon, starch, natural mother-of-pearl, boron nitride, microspheres, microsponges, polyethylene powders, Nylon powders, microbeads of silicone resin and silica microspheres.

51. The emulsion according to claim 50, wherein said at least one filler is present in an amount ranging from 0 to 20% by weight relative to the total weight of the emulsion.

52. The emulsion according to claim 51, wherein said at least one filler is present in an amount ranging from 0 to 10%.

53. The emulsion according to claim 50, wherein said at least one filler has an average particle size of 15 microns or less.

54. The emulsion according to claim claim 50, wherein said at least one filler is non spherical.

55. The emulsion according to claim 49, wherein the weight ratio of said at least one filler to said at least one silicone oil, in the composition applied on the skin and after evaporation of any volatile oils, is from 30:70 to 50:50.

56. The emulsion according to claim 49, wherein  $n_1$  represents the average refractive index of the totality of said at least one fillers and  $n_2$  represents the average refractive index of the totality of said at least one silicone oil, then:

$$0 < |n_1 - n_2| \leq 0.3.$$

57. The emulsion according to claim 56, wherein

$$0 < |n_1 - n_2| \leq 0.15.$$

58. The emulsion according to claim 12, wherein said emulsion further comprises a film-forming compound.

59. The emulsion according to claim 12, wherein said emulsion further comprises a cosmetically, pharmaceutically or hygienically acceptable medium.

60. The emulsion according to claim 12, wherein said emulsion further comprises additives present in a proportion ranging from 0 to 10% by weight.

61. The emulsion according to claim 12, wherein said emulsion has a dynamic viscosity ranging from 100 mPa.s, this viscosity being measured on a Rheomat 180 from Mettler using a Spindle No. 2 at 25°C, at a shear rate of 200s<sup>-1</sup>, and at time t=10 minutes.

62. A composition for cosmetic, dermatological, pharmaceutical or hygiene use, wherein said composition comprises an emulsion according to claim 12.

63. The composition according to claim 62, wherein said composition is in the form of a care product for the body and/or the face and/or the scalp, or a make-up product, in in the form of a foundation, a blusher, an eyeshadow, an eyeliner, a mascara or a lipstick.

64. The composition according to claim 62, wherein said composition is in the form of a thickened emulsion, a fluid emulsion, a cream, a milk or a serum.

65. The composition according to claim 64, wherein said composition is in the form of a fluid emulsion.

66. A process for the non-therapeutic treatment process for the skin and/or keratin fibres, comprising applying an effective amount of an emulsion according to claim 12 and/or a composition containing an emulsion according to claim 12 to said skin and/or to said keratin fibres.